

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 62-057808

(43)Date of publication of application : 13.03.1987

(51)Int.Cl.

B23B 51/00

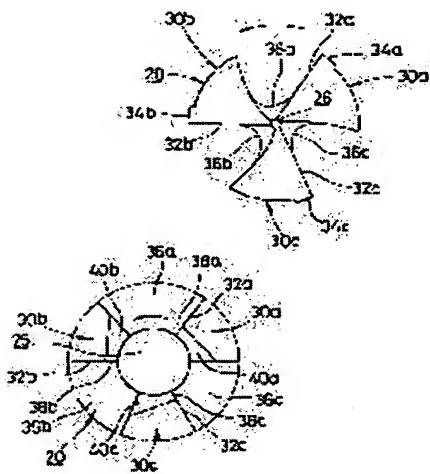
(21)Application number : 60-198000

(71)Applicant : HONDA MOTOR CO LTD

(22)Date of filing : 06.09.1985

(72)Inventor : OKUNISHI HIROSHI
KATOU NOBUYOSHI
FUKUSHIMA HIROYUKI
YUGAWA MASAYOSHI

(54) DRILL



(57)Abstract:

PURPOSE: To reduce cutting resistance of a drill and to enable its high speed feed to be performed, by providing a hole, which opens to an edge point central part of the drill penetrating through on the center line, and forming subedges, having flanks formed so as to spread the hole, to be placed inside plural cutting edges connecting with the hole.

CONSTITUTION: A drill 20, rotating in the direction of an arrow head in the drawing and feeding cutting fluid from a hole part 26, cuts a workpiece by cutting edges 32aWc, having flanks 30aWc, and subedges 38aWc, having flanks 40aWc, and a hole in a diameter, formed by lands 34aWc, is drilled. Here the location, corresponding to an edge point central part, crushes cutting chips to be removed by the subedges 38aWc and a generated built-up edge, and the drill transfers the cutting chips along clearance grooves 36aWc to be discharged. And the drill, when it is in a process of penetration or returning, discharges the

cutting chips, generated in a part surrounded by the built-up edge, in accordance with its falling off. Accordingly, the edge point central part provides small resistance against a feed of the drill, and the drill, substantially reducing its cutting resistance, is enabled to be fed in a high speed.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]